

Application No.: 09/960,487

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This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claims 1-23. (Canceled)

24. (Previously Presented) A welding wire, comprising:

a wire having a wire surface; and

a deposit on the wire surface,

wherein the deposit comprises

at least one lubricating particle, and

at least one carboxylic acid selected from the group consisting of pentanoic acid, caproic acid, caprylic acid, octylic acid, secanoic acid, capric acid, decanoic acid, lauric acid, linderic acid and synthetic fatty acids;

and wherein the at least one lubricating particle comprises a material selected from the group consisting of molybdenum disulfide, tungsten disulfide, graphite carbon and polytetrafluoroethylene.

25. (Previously Presented) A welding wire, comprising:

a wire having a wire surface; and

a deposit on the wire surface,

wherein the deposit comprises

at least one lubricating particle, and

at least one compound selected from the group consisting of (a) saturated or unsaturated, linear or branched, carboxylic acid having from 5 to 12 carbon atoms; (b) a

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metal carboxylate, and the metal is selected from the group consisting of Mg, Al, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Zr, Sn, Pb and Ce, and mixtures of (a) and (b);

and wherein the at least one lubricating particle comprises a material selected from the group consisting of molybdenum disulfide, tungsten disulfide, graphite carbon and polytetrafluoroethylene.

26. (Previously Presented) A welding wire, comprising:

a wire having a wire surface; and

a deposit on the wire surface,

wherein the deposit comprises

at least one lubricating particle, and

at least one compound selected from the group consisting of (a) saturated or unsaturated, linear or branched, carboxylic acids having from 5 to 12 carbon atoms;

and wherein the at least one lubricating particle comprises a material selected from the group consisting of molybdenum disulfide, tungsten disulfide, graphite carbon and polytetrafluoroethylene.

27. (Previously Presented) A welding wire, comprising:

a wire having a wire surface; and

a deposit on the wire surface,

wherein the deposit comprises

at least one lubricating particle, and

at least one compound (a) selected from the group consisting of saturated or

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unsaturated, linear or branched, carboxylic acids having from 5 to 12 carbon atoms;

wherein a total amount of said carboxylic acid (a) is 0.001 to 2 g per 10 kg of the wire;

and wherein the at least one lubricating particle comprises a material selected from the group consisting of molybdenum disulfide, tungsten disulfide, graphite carbon and polytetrafluoroethylene;

wherein the deposit further comprises at least one lubricating oil selected from the group consisting of animal and plant oils, mineral oils, and synthetic oils; and

wherein the carboxylic acid and the at least one lubricating particle are present on the wire surface in a total amount of 0.1 to 5 g per 10 kg of the wire.

28. (Previously Presented) A welding wire, comprising:

a wire having a wire surface; and

a deposit on the wire surface,

wherein the deposit comprises

at least one lubricating particle, and

a mixture of (a) and (b);

wherein (a) is a carboxylic acid selected from the group consisting of pentanoic acid, caproic acid, caprylic acid, octylic acid, secanoic acid, capric acid, decanoic acid, lauric acid, linderic acid and synthetic fatty acids; and

wherein (b) is a metal carboxylate that is a metal salt of a carboxylic acid selected from the group consisting of pentanoic acid, caproic acid, caprylic acid, octylic acid, secanoic acid, capric acid, decanoic acid, lauric acid,

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linderic acid and synthetic fatty acids;

wherein a total amount of said carboxylic acid (a), said metal carboxylate (b) or said mixture of (a) and (b) is 0.001 to 2 g per 10 kg of the wire;

and wherein the at least one lubricating particle comprises a material selected from the group consisting of molybdenum disulfide, tungsten disulfide, graphite carbon and polytetrafluoroethylene.

29. (Previously Presented) The welding wire according to Claim 24, further comprising a metal carboxylate that is a metal salt of a carboxylic acid selected from the group consisting of pentanoic acid, caproic acid, caprylic acid, octylic acid, secanoic acid, capric acid, decanoic acid, lauric acid, linderic acid and synthetic fatty acids; and

the metal salt comprises a metal selected from the group consisting of Li, Na, Mg, Al, K, Ca, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Zr, Sn, Cs, Pb and Ce.

30. (Previously Presented) The welding wire according to Claim 24, wherein the deposit further comprises at least one lubricating oil selected from the group consisting of animal and plant oils, mineral oils, and synthetic oils.

31. (Previously Presented) The welding wire according to Claim 30, wherein the at least carboxylic acid and the at least one lubricating particle are present on the wire surface in a total amount of 0.1 to 5 g per 10 kg of the wire.

32. (Previously Presented) A method of making welding wire of Claim 24, the

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method comprising:

coating the wire with the deposit.

33. (Previously Presented) The welding wire according to Claim 24, wherein the at least one lubricating particle is molybdenum disulfide.

34. (Previously Presented) The welding wire according to Claim 24, wherein the at least one lubricating particle is tungsten disulfide.

35. (Previously Presented) The welding wire according to Claim 24, wherein the at least one lubricating particle is graphite carbon.

36. (Previously Presented) The welding wire according to Claim 24, wherein the at least one lubricating particle is polytetrafluoroethylene.

37. (Previously Presented) The welding wire according to Claim 25, wherein the carboxylic acid is selected from the group consisting of pentanoic acid, caproic acid, caprylic acid, octylic acid, secanoic acid, capric acid, decanoic acid, lauric acid, linderic acid and synthetic fatty acids.

38. (Previously Presented) The welding wire according to Claim 25, wherein the deposit further comprises at least one lubricating oil selected from the group consisting of animal and plant oils, mineral oils, and synthetic oils.

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39. (Previously Presented) The welding wire according to Claim 38, wherein the at least one compound and at least one lubricating particle are present on the wire surface in a total amount of 0.1 to 5 g per 10 kg of the wire.

40. (Previously Presented) A method of making welding wire of Claim 25, the method comprising:

coating the wire with the deposit.

41. (Previously Presented) The welding wire according to Claim 38, wherein the at least one compound is (a) the carboxylic acid, and wherein the carboxylic acid and the at least one lubricating particle are present on the wire surface in a total amount of 0.1 to 5 g per 10 kg of the wire.

42. (Previously Presented) The welding wire according to Claim 25, wherein the at least one compound is the (b) metal carboxylate, and wherein the metal carboxylate and the at least one lubricating particle are present on the wire surface in a total amount of 0.1 to 5 g per 10 kg of the wire.

43. (Previously Presented) The welding wire according to Claim 25, wherein the at least one lubricating particle is molybdenum disulfide.

44. (Previously Presented) The welding wire according to Claim 25, wherein the at

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least one lubricating particle is tungsten disulfide.

45. (Previously Presented) The welding wire according to Claim 25, wherein the at least one lubricating particle is graphite carbon.

46. (Previously Presented) The welding wire according to Claim 25, wherein the at least one lubricating particle is polytetrafluoroethylene.

47. (Previously Presented) The welding wire according to Claim 26, wherein the carboxylic acid is selected from the group consisting of pentanoic acid, caproic acid, caprylic acid, octylic acid, secanoic acid, capric acid, decanoic acid, lauric acid, linderic acid and synthetic fatty acids.

48. (Previously Presented) The welding wire according to Claim 26, wherein the deposit further comprises at least one lubricating oil selected from the group consisting of animal and plant oils, mineral oils, and synthetic oils.

49. (Currently Amended) The welding wire according to Claim 48, wherein the carboxylic acid and at least one lubricating particle are present on the wire surface in a total amount of 0.1 to 5 g[[.]] per 10 kg of the wire.

50. (Previously Presented) A method of making welding wire of Claim 26, the method comprising:

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coating the wire with the deposit.

51. (Previously Presented) The welding wire according to Claim 26, wherein the at least one lubricating particle is molybdenum disulfide.

52. (Previously Presented) The welding wire according to Claim 26, wherein the at least one lubricating particle is tungsten disulfide.

53. (Previously Presented) The welding wire according to Claim 26, wherein the at least one lubricating particle is graphite carbon.

54. (Previously Presented) The welding wire according to Claim 26, wherein the at least one lubricating particle is polytetrafluoroethylene.

55. (Previously Presented) The welding wire according to Claim 27, wherein the at least one carboxylic acid is selected from the group consisting of pentanoic acid, caproic acid, caprylic acid, octylic acid, secanoic acid, capric acid, decanoic acid, lauric acid, linderic acid and synthetic fatty acids.

56. (Previously Presented) The welding wire according to Claim 27, further comprising metal salt of a carboxylic acid selected from the group consisting of pentanoic acid, caproic acid, caprylic acid, octylic acid, secanoic acid, capric acid, decanoic acid, lauric acid, linderic acid and synthetic fatty acids; and

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the metal salt comprises a metal selected from the group consisting of Li, Na, Mg, Al, K, Ca, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Zr, Sn, Cs, Pb and Ce.

57. (Previously Presented) A method of making welding wire of Claim 27, the method comprising:

coating the wire with the deposit.

58. (Previously Presented) The welding wire according to Claim 27, wherein the at least one lubricating particle is molybdenum disulfide.

59. (Previously Presented) The welding wire according to Claim 27, wherein the at least one lubricating particle is tungsten disulfide.

60. (Previously Presented) The welding wire according to Claim 27, wherein the at least one lubricating particle is graphite carbon.

61. (Previously Presented) The welding wire according to Claim 27, wherein the at least one lubricating particle is polytetrafluoroethylene.

62. (Previously Presented) The welding wire according to Claim 28, wherein the metal salt comprises a metal selected from the group consisting of Li, Na, Mg, Al, K, Ca, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Zr, Sn, Cs, Pb and Ce.

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63. (Previously Presented) The welding wire according to Claim 28, wherein the deposit further comprises at least one lubricating oil selected from the group consisting of animal and plant oils, mineral oils, and synthetic oils.

64. (Previously Presented) The welding wire according to Claim 63, wherein the at least one compound and at least one lubricating particle are present on the wire surface in a total amount of 0.1 to 5 g per 10 kg of the wire.

65. (Previously Presented) The welding wire according to Claim 28, wherein the mixture of (a) and (b) and the at least one lubricating particle are present on the wire surface in a total amount of 0.1 to 5 g per 10 kg of the wire.

66. (Previously Presented) A method of making welding wire of Claim 28, the method comprising:

coating the wire with the deposit.

67. (Previously Presented) The welding wire according to Claim 28, wherein the at least one lubricating particle is molybdenum disulfide.

68. (Previously Presented) The welding wire according to Claim 28, wherein the at least one lubricating particle is tungsten disulfide.

69. (Previously Presented) The welding wire according to Claim 28, wherein the at

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least one lubricating particle is graphite carbon.

70. (Previously Presented) The welding wire according to Claim 28, wherein the at least one lubricating particle is polytetrafluoroethylene.

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BASIS FOR THE AMENDMENT

Claim 49 has been amended to correct the Examiner's Amendment. Applicants note that in the previous Amendment, filed February 18, 2004, Claim 49 continued on page 9, first line. Thus, the Examiner's Amendment which included a period after "5g" in line 2 of the claim was incorrect.

No new matter is believed to have been added by entry of this amendment. This amendment was not presented earlier because the error was not discovered earlier. No further search and/or consideration are required.

Upon entry of this amendment Claims 27-70 remain active in this application.

Applicants submit that the present application remains in condition for allowance and early notice of such action is earnestly solicited.

Customer Number
22850

Respectfully submitted,

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